



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1656; Project Identifier AD-2022-01081-A; Amendment 39-22422; AD 2023-08-07]

RIN 2120-AA64

Airworthiness Directives; Allied Ag Cat Productions, Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Allied Ag Cat Productions, Inc. (Allied Ag Cat) Model G-164A and G-164B airplanes with certain supplemental type certificates (STCs) installed. This AD was prompted by an accident involving an Allied Ag Cat Model G-164B airplane where the airplane's propeller pitch control (PPC) linkage detached from the PPC of the engine and resulted in an accident that significantly damaged the airplane and injured the pilot. This AD requires installing a secondary retention feature (bolt, washer, and safety wire) on the PPC lever and the PPC assembly. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2022-1656; or in person at Docket Operations between 9 a.m.

and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Honeywell International, Inc., 111 South 34th Street, Phoenix, AZ 85034; phone: (800) 601-3099; website: aerospace.honeywell.com.
- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov by searching for and locating Docket No. FAA-2022-1656.

FOR FURTHER INFORMATION CONTACT: Justin Carter, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, TX 76177; phone: (817) 222-5146; email: justin.carter@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Allied Ag Cat Model G-164A and G-164B airplanes with certain STCs installed. The NPRM published in the *Federal Register* on December 28, 2022 (87 FR 79821). The NPRM was prompted by a report of an accident involving an Allied Ag Cat Model G-164 airplane where the airplane's PPC linkage detached from the PPC of the engine. The pilot sustained serious injuries, and the airplane was substantially damaged. The root cause was determined to be a lack of a secondary retention feature for the PPC of the engine. In the NPRM, the FAA proposed

to require installing a secondary retention feature (bolt, washer, and safety wire) on the PPC lever and the PPC assembly. The FAA is issuing this AD to address the unsafe condition on these products. This condition, if not addressed, could result in reduced control of the airplane.

Aircraft configurations for airplanes with the potential for this condition to exist are as follows:

- Model G-164A airplanes with STC No. SA7769SW, SA7966SW, or SA8720SW installed; and
- Model G-164B airplanes with STC No. SA7546SW, SA7966SW, SA7987SW, or SA8720SW installed.

Discussion of Final Airworthiness Directive

Comments

The FAA received two comments from Honeywell, Inc. (Honeywell). The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Clarify Unsafe Condition

Honeywell requested that paragraph (e), Unsafe Condition, of the proposed AD be revised to specify "detachment of the airplane's propeller pitch control linkage (PPC)" instead of "detachment of the propeller pitch control (PPC) linkage." The commenter explained that this change would differentiate the linkage of the aircraft type design from the linkage of the engine type design.

The FAA agrees and revised paragraph (e) of this AD accordingly. The FAA also revised the SUMMARY and Background sections of this final rule to clarify detachment of the airplane's PPC.

Request to Revise Paragraph (g) of the Proposed AD

Honeywell requested that the FAA delete the last sentence, “Part re-identification is required only if rework is done” from paragraph (g), Install Secondary Retention Feature, of the proposed AD. The commenter explained that this sentence could be misinterpreted as negating re-identification instructions that are included elsewhere in Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011. The commenter noted that the intent of this sentence is adequately addressed by “After the rework is completed, re-identify the part number of the PPC assembly, cam assembly, and shouldered shaft . . .” which is also in paragraph (g) of the proposed AD.

The FAA agrees and deleted “Part re-identification is required only if rework is done” from paragraph (g) of this AD.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information under 1 CFR part 51

The FAA reviewed Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011. This service information identifies the affected PPC assemblies and applicable engines, and specifies procedures for reworking the affected PPC assemblies to incorporate a threaded hole in the splined end of the shouldered shaft. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Other Related Service Information

The FAA reviewed the Honeywell TPE331 Propeller Pitch Control Lever letter, dated August 26, 2011, addressed to the original equipment manufacturer (OEM). This letter informs the OEM of a report Honeywell received about the TPE331 PPC lever shaft becoming detached from the PPC assembly cam shaft and communicates the future development of a Honeywell service bulletin (released as Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011).

Costs of Compliance

The FAA estimates that this AD affects 200 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Installation of secondary retention feature.	4 work-hours x \$85 per hour = \$340	\$1,000	\$1,340	\$268,000

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2023-08-07 Allied Ag Cat Productions, Inc.: Amendment 39-22422; Docket No. FAA-2022-1656; Project Identifier AD-2022-01081-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Allied Ag Cat Productions, Inc. airplanes, all serial numbers, certificated in any category.

(1) Model G-164A airplanes with Supplemental Type Certificate (STC) No. SA7769SW, SA7966SW, or SA8720SW installed.

(2) Model G-164B airplanes with STC No. SA7546SW, SA7966SW, SA7987SW, or SA8720SW installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 6120, Propeller Controlling System.

(e) Unsafe Condition

This AD was prompted by a report of an accident caused by the detachment of the airplane's propeller pitch control (PPC) linkage from the PPC of the engine. The FAA is issuing this AD to prevent the PPC linkage from detaching from the PPC of the engine. The unsafe condition, if not addressed, could result in reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Install Secondary Retention Feature

Within 12 months after the effective date of this AD, install a secondary retention feature (bolt, washer, and safety wire) on the PPC lever and the PPC assembly. If rework of the PPC assembly (specifically, the shouldered shaft within the cam assembly within

the PPC assembly) is required to do this installation, do the rework in accordance with the procedures in Section 3.C(3)(d)2 of Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011. After the rework is completed, re-identify the part number of the PPC assembly, cam assembly, and shouldered shaft, in accordance with Sections 3.C(4), 3.C(5), and 3.C(7), as applicable, of Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011.

Note 1 to paragraph (g): Honeywell TPE331 Propeller Pitch Control Lever letter, dated August 26, 2011, to the original equipment manufacturer, contains information related to this subject.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Justin Carter, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, TX 76177; phone: (817) 222-5146; email: justin.carter@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (j)(3) and (4) of this AD.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Honeywell Service Bulletin TPE331-72-2190, Revision 0, dated December 21, 2011.

(ii) [Reserved]

(3) For service information identified in this AD, contact Honeywell International, Inc., 111 South 34th Street, Phoenix, AZ 85034; phone: (800) 601-3099; website: aerospace.honeywell.com.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on April 19, 2023.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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